



VOL. VI. NO. 29.

CLEVELAND, O., JULY 17, 1884.

\$2.00 PER ANNUM
SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

Captain C. C. Goodwin has returned from Erie.

The R. K. Hawley will hereafter do towing work at Ashtabula.

A three masted boat is reported ashore two miles below Fox River, Ontario.

The cribs for the foundation of the new light is finished and ready for the superstructure.

The seaman's union are reducing wages, making them uniform with the low freight rates prevailing.

Captain Robert Greenhalgh has opened his tug office across the street from the old office he occupied so long.

Judge Welker of the United States district court has been confined to his bed eight or ten days at his home in Wooster, Ohio.

The harbor tug C. E. Bolton, which has been engaged in towing at Ashtabula had some repairs made at this port. She will return to Ashtabula.

Masters on arriving at Portage find they are called on to pay 12½ cents per ton on carrying capacity instead of 8 cents, as they had been led to believe.

The disappearance of the buoy marking a fourteen feet shoal at Grosse Isle constantly endangers vessels entering the channel and should be replaced at once.

The steamer Keweenaw, under the management of the Cleveland Forwarding Company, is well patronized. She has become a great favorite of excursion parties.

The new steamer Calumet, Captain, R. Graves, recently launched at Buffalo, made her first appearance at this port on Monday with a cargo of 1718 tons of ore from Marquette. She will take coal for Duluth.

The charters reported yesterday include the schooner J. S. Richards, coal from Cleveland to Marquette, 60c, free; same vessel ore back from Marquette to Cleveland, \$1 10; barge Waverly, coal from Cleveland to Detroit, 30c.

Captain L. Campbell has purchased at marshal's sale for \$200 the schooner Buena Vista, sunk last season. She will be raised and overhauled. The Buena Vista was built at Cleveland by Dickenson in 1847, making her one of the old timers, and was owned by Robinson of Milwaukee when she was sunk. She is 148 tons burden.

Accident by collision on the lakes is growing alarmingly frequent, and with the great number of vessels now traversing the same course either way, will continue to grow until some universal code of signals is adopted for the express purpose of avoiding these dangers.

The barge Transport, Captain Glass, takes coal to East Saginaw at 40c for hold and 45c for deck load, which is probably the best charter of the week. The genial owner of the Transport, Mr. T. H. Cahoon, will take a pleasure and business trip to Au Sable on the steamer Salina, on her next appearance at this port.

A libel was filed in the United States district court, on the 10th instant by J. E. Upson, J. W. Walton and Henry F. Lyman partners as Upson, Walton & Co., against the tug James Reid. They claim due them the sum of \$45.00 for a capstan furnished the tug April 28, 1883. The tug has been seized by the United States Marshal, but the owners obtained her release upon furnishing security for the debt.

On the 11th of June last, John E. Botsford, Wm. F. Botsford and Frank Webner, of Detroit, Michigan, filed a libel, in the United States district court, against the lumber barge Saginaw in which they claim due them the sum of \$500 for towage service from Port Huron to Cleveland, rendered on the part of their steamboat Concord. The Saginaw was sold on the 12th day of July to Captain E. M. Becker for \$165.50. She is at present aground in the old river bed.

At Globe drydock since our last report the schooner Helen had her bottom calked; the Jarvis Lord received some new brasses; the schooner Camden had a leak stopped; the propeller Oconto received a new wheel; and the schooner Montana had her butts calked and was tightened. The propeller Pacific, in collision with the Canadian steamer Alberta, which arrived at this port on Sunday with her bows patched up, went into drydock for repairs. The amount of damage has not yet been learned.

FRANKFORT.

Special to the Marine Record.

The schooner George Barber, which went ashore at Good Harbor early in the season was released by the tug D. P. Hall on the 9th. It took eleven hours to accomplish it. The schooner is waterlogged and was taken to Charlevoix by the tug Payne for repairs. The George Barber was built at Milwaukee by Barber in 1857, is 98 tons burden and was owned by H. Olson, at Charlevoix.

The steambarge W. H. Gratwick and consorts Robert L. Fryer and Selden E. Marvin are loading pine lumber for Tonawanda at \$2 per M., a very low freight rate. The three barges carry nearly two million feet of lumber.

C. B.

CHICAGO.

Special to the Marine Record.

Some lake tramps or vagabonds went to sleep in the schooner Westchester's foresail Saturday night, and out of pure spite cut it up and tore it so that Captain Clark had to send it to the sailmaker to be repaired. Instances of this kind are very numerous around the docks, and it is a good argument in favor of appointing harbor police.

The tug Brothers was libeled by Captain Joe Hubbard, who claims that she owes him \$193 for services as master. The attorney filing the libel did no more than serve the papers on her and she was allowed to run without interruption.

The schooner Cecelia arrived in port minus a number of stanchions, a part of her sail and with one or two frames broken. She had a collision at Jacksonport with the steamer Corona. The latter was being beamed around the bay at that port and struck the Cecelia stern on. Her master intends to bring suit against the Goodrich Transportation Company, owners of the Corona, if his repair bill is not settled.

The tugs A. Miller and A. Mosher collided in the river Sunday evening, and the former boat had her stem badly damaged. The Mosher met with another mishap also, while towing astern of the barge Brunette. At the bend near Lake street bridge Captain Sinclair tried to shove the big barge's stern around and parted his port line. Before he could stop his tug the starboard line had caught the fore-castle companion-way and it was completely demolished. Repairs are being made to both boats.

The wholesale fining of tug boats for carrying passengers has had the effect of bringing many tug-owners to the office of the inspectors of steam vessels to get their licenses and enrollment papers so changed that their craft may come under the head of steam yachts. All vessels under this classification are entitled to the privilege of carrying passengers, and it does not prevent them from towing vessels when they want to.

Miller Brothers have made arrangements to add the Vessel Owners' drydock and shipyard to their own already fine docks and shipyard. They have done very much toward the interest of the shipping community at this port and deserve to have great success in their new enterprise.

The cargo of coal which went down with the schooner Wells Burt more than a year ago, off Evanston, has been gotten up and efforts are being made to raise the hull.

Captain David Dall's schooner Lincoln Dall has been released and towed to Milwaukee where she will be rebuilt by Wolf & Davidson. She was rebuilt at Grand Haven in 1881-82.

The schooner Advance, Captain M. Paulsen, is in Miller Brothers' drydock getting some new plank on her bilge and a general overhauling and calking.

The repairs on the schooner Lady Dufferin are nearly completed and she will go out of drydock this week.

Larsen Brothers, yacht and boat builders, launched from their yard on Monday last a very handsome steam yacht 52 feet in length over all, 12 feet beam, and 5 feet depth of hold. She will have an engine 8x10 and a steel boiler 4 feet in diameter and 7 feet high. She is owned by Captain Nugent and Engineer Dan McManon, who will run her as an excursion boat at the lake front until fall, when they will take her to New Orleans.

At the Chicago Drydock Co.'s yard the schooner Topsy was in drydock and got a leak stopped; the schooner John Bigler got her bottom calked; schooner Michelson got a leak stopped and some plank in her bow; the propeller Peerless got some repairs; the steambarge St. Joseph had a log taken out of her wheel; the schooner Redwing got a new jibboom; the steam yacht Brett Harte, some new rail.

The tenth annual regatta of the Chicago yacht club took place on Saturday last, when some excellent racing was seen, taking into consideration the light wind that prevailed. Seven yachts started, which were classed as follows: First-class, Wasp and Cora; second-class, Verve, La Campana and O. K.; third-class, Zephyr and Una. The following were the prizes: For first-class yachts, a solid silver pitcher, value \$175; second-class yachts, a silver cup, value \$125; third-class yachts, a silver cup, value \$100. The yachts passed the starting point between the Government breakwater, opposite Van Buren street in the following order: Cora, 12:09:50; Verve, 12:12:50; La Campana, 12:14:04; Wasp, 12:15:15; Zephyr, 12:16:04; Una, 12:17:25, and O. K., 12:25:30. The race was over a triangular course of eighteen miles. The Verve passed the first buoy about one minute ahead of the Wasp, the Cora following about fifty seconds later. At the second buoy the Wasp had a good lead of the Cora and the Verve was following close behind the latter. The run home was before the wind and every stitch of canvas was spread. The Wasp maintained her lead and came in first at 3:25:40, the Cora at 3:32:41, the Verve at 3:35:34. The Wasp

took the prize in the first-class, the Verve the prize in the second-class and the Zephyr, which came in at 4:24:08, took the prize in the third-class. It was a clear runaway, on the part of the Verve, from her competitors in the second-class, as she made better time than the Cora, and would easily have beaten Wasp if she had been sailing in the first-class with a proper time allowance.

The demand for tonnage was good yesterday and freights active and firm on a basis of 2 cents for wheat and 1¾ cents per bushel for corn to Buffalo, and 1½ cents for oats. There were no changes in rates to Lake Ontario.

The schooner Cecelia arrived in Chicago in a badly disabled condition, the result of a collision with the Goodrich line steamer Corona. Last Saturday morning the Cecelia entered the harbor at Jacksonport to take on her cargo. Before reaching the piers the Corona backed out and struck her between the main and fore rigging. Her side was badly stove in, several stanchions smashed, and a part of her rail carried away. Her deck was started by the steamer striking on end of one of her beams. Captain Smith says his vessel would probably have been sunk had she not been sound and in good condition. He states that he asked the captain to tow the Cecelia to Manitowoc for repairs but was told to run his boat up into the woods. The damage to the schooner is estimated by her captain at \$400. The Corona was not injured.

The steamship City of Rome, coal laden from Buffalo, was towed into Chicago in a disabled condition. While coming up the lake she broke a cylinder head and piston. Repairs will be made at once, and it is thought she will not be delayed.

Justice Scott, of the Illinois Supreme Court, has granted a stay of proceedings in the case of Harmon vs. the City of Chicago. This case involves the legality of the smoke ordinance passed by the city council, and which compelled the tugs on the river to use hard coal or smoke consumers, both of which it has been found impossible to do. The tug owners, railroad companies and others presented a long petition to the justice for a rehearing, with the above result. They are greatly elated over their victory, which in the end they think will be a permanent one.

T. W.

MILLEN'S BAY.

Special to the Marine Record.

The tug Hattie Bearup is in Rees's drydock having her bottom scraped.

The fleet yacht Letter B, under the management of F. W. Lloyd, will be used for a pleasure yacht.

The steamer St. Lawrence, on her maiden trip, stopped here with a large crowd on board. She is owned by Folger and Barker. Milo Estes is captain.

As the tug Gus Faivre was towing the Lady Haff to this port Tuesday, the big flue of her boiler burst, knocking out Engineer Haff's eye.

H. W. R.

MARINE CITY.

Special to the Marine Record.

Captain Rice has retired from the lakes and has gone into the coal business. He has got one of the best coal docks on St. Clair river and has a large stock always on hand of the best grades of coal. You will always find on his dock the Beaver Run and 2,000 pounds to the ton. He has an elevated dock for coaling those large double deckers. He has the best coal men to load night or day and plenty of water at his dock.

T. A. E.

MARINE LAW.
HARBOR MASTERS.

Court of Common Pleas, New York.—General Term.

Chester S. Cole, as Captain of the Port of New York, against Michael Mahoney.—Appeal from an order of the general term of the city court affirming a judgment entered upon a verdict at trial term.

On May 8, 1882, the canal boat Emma was lying at a certain bulkhead in the port of New York, in charge of the defendant Mahoney. On that day one of the harbor masters of said port ordered Mahoney to remove the boat from the place at which she was stationed. He refused and neglected to obey said order. The plaintiff then brought this action, setting up in his complaint the facts above stated; that the defendant thereby became liable to him in the sum of \$50, according to the provisions of the laws of the State of New York in such case made and provided. The defendant, by his answer, admitted that the boat was in his charge at the time and place above stated, and that he was then discharging his cargo therefrom by authority of one of the harbor masters of said port. Issue was joined upon the pleadings and a trial had which resulted in a verdict in favor of the plaintiff, from which appeal is taken.

The act of 1862 (chap. 487) in regard to the harbor masters is general in its character, and is not limited to cases where other vessels require to be immediately accommodated in receiving or discharging cargoes. They have power to act summarily, and their duty in this respect may be considered a necessary police regulation. The statute contemplates prompt and decisive action.

Larremore, J.—At the commencement of the trial the defendant moved to dismiss the complaint "as not stating facts sufficient to constitute a cause of action," and upon the further ground that the statute under which it was brought was not properly pleaded. The motion was denied, and the defendant excepted.

In this there was no error, for the court was bound to take judicial notice of chapter 487 of the laws of 1862.

The judge submitted the question of fact to the jury whether or not the plaintiff showed or exhibited to the defendant a copy of the law above referred to, as required by the 15th section thereof, and to the charge upon such submission no exception was taken.

The main contention at the trial and upon this appeal relates to the construction to be given to section 7 of the act above mentioned. Section 7 provides that "Each harbor master shall have power within the district assigned to him, to provide and assign suitable accommodations for all ships and vessels and regulate them in the stations they are to occupy at the wharves or in the stream, and to remove from time to time such vessels as are not employed in receiving or discharging their cargoes, to make room for such others as require to be immediately accommodated for the purpose of receiving or discharging their cargoes, and shall have power to determine as to the fact of their being fairly and in good faith employed receiving or discharging their cargoes, and shall have the authority to determine how far and in what instance it is the duty of the master and others having charge of ships and vessels to accommodate each other in their respective situations, and if any master or any person having charge of any vessel, canal boat, barge or lighter, shall refuse or neglect to remove his vessel, canal boat, barge or lighter when ordered to do so by the Captain of the Port or by the harbor master, or shall resist or forcibly oppose said officers in the discharge of their duties, such master or person so refusing, neglecting, resisting or opposing, shall for every such offense, forfeit and pay the sum of fifty dollars, to be recovered with costs of suit by and in the name of the Captain of the Port, before any court having cognizance thereof.

It was held by this court, in Adams vs. Farmer (1 E. D. Smith, 588,) under an act similar to the one in question, that the power given by the statute to harbor masters is general in character and not limited to cases where other vessels require to be immediately accommodated in receiving or discharging cargoes.

That a harbor master should have power to act summarily is evident from the

language of the statute. His duty in this respect may be considered a necessary police regulation. If in any or every case the validity of his action should first be tried and determined by a jury, the very object of the statute might be defeated on account of the delay incident to such litigation. The statute contemplates prompt and decisive action in the cases for which it provides by the officer intrusted with the performance of its duties. He is if he shall exceed or abuse his authority amenable to the law like any other public officer. The statute gives him jurisdiction and requires him to decide upon the very facts which the appellant contends should have been submitted to the jury. (Cole vs. Kelly, 1 City Ct. Rep. 400.)

I have not overlooked the case of Hoeft vs. Seaman (38 Superior court Rep., 62.) The Special Term of that court sustained an injunction *pendente lite* upon the ground that it did not appear that there was any impending necessity or application for the immediate use of the pier where the floating bath was located by written permission of the department of docks. Assuming, as the court held, that harbor masters are officers of limited jurisdiction, and can only exercise such powers as are expressly given, yet in the case at bar, the statute expressly says that such officers may remove vessels not employed *c.*, and make room for others, and shall have power to determine the fact of good faith as to receiving and discharging cargoes. There was no evidence of the exercise of any arbitrary power, but only that which the statute expressly conferred.

The repeal of the act of 1862 cannot affect the rights vested by a prior judgment without a saving clause to that effect (Church vs. Rhodes, 6 How., 281; Harting vs. The People, 22 N. Y., 95.) The case last cited points out the distinction of the effect of an *ex post facto* law between a criminal proceeding upon a writ of error and a review upon an appeal of an action under the Code. In the latter case it was held that the judgment reviewed was controlled by the law as it stood when such judgment was pronounced.

The other objections in the case do not appear to have been well taken, and the judgment should be affirmed, with costs.

J. F. Daly & Van Hoesen, JJ., concur.

Hyland & Zabriskie for appellant; Goodrich, Deady & Platt for respondent.
Filed May 22, 1894.

SAILING THE WATER.

Not many sailors visit the patent office, and patent office reports are not found in the collection of books called ship's libraries, but sailors and the general public would be greatly interested if they could see models of the many queer devices that have been invented to aid in the navigation of the sea. The improvements in ships which have finally culminated in the clipper steamship America, and the ocean greyhounds Oregon and Alaska, have been made, in many instances, by men who knew little or nothing of seafaring matters. The inventors have succeeded in spite of the active opposition or the passive indifference of practical men, but in doing so they have sunk a great deal of money in experiments that proved worthless or premature. Perhaps after all the most singular feature of the history of steamboat improvement is not so much in the queer devices of the inventors as in the lack of attention which genuine improvements have attracted. The

FIRST SUCCESSFUL AMERICAN STEAMBOAT was built from designs by John Fitch, a native of Pennsylvania, who was neither ship-builder nor sailor, and this boat ran as a passenger steamboat in the summer of 1790, between Philadelphia and Trenton, making regular trips, but at the end of the season she was laid up, and was not again used, because the margin of profit was so small. It was seventeen years thereafter before Fulton made a success of the Clermont on the Hudson.

Not less singular than this long period in which a practical idea was dormant is the lack of attention that has been given to one of Fulton's inventions. In 1801 Fulton, who, like Fitch, was a Pennsylvanian, was at Brest experimenting with

A SUBMARINE BOAT.

The size of the boat is not known, but she was sloop-rigged. On July 3d he descended under water with her by successive steps of five feet each to a depth of twenty-five feet. He had three companions with him. They were in total darkness during the trip. Later he carried candles, but as they burned up the oxygen of the air he discarded them, and put in a round glass window one inch and a half in diameter, and found on the 24th that the window gave a satisfactory light. Two days later he gave a public exhibition of his boat. Sailing from the pier a short distance, he struck the masts and sails

and got ready for a dive in two minutes. With two men to turn the propelling apparatus and one to steer, he plunged under the water and started ahead. In seven minutes he rose to the surface, having traversed a distance of 500 yards in that time. When he went down a second time he turned the boat around, backed it, and suspended it at various depths with ease. Having placed in her a heavy copper globe, one foot in diameter, filled with compressed air, at a pressure of 200 atmospheres, he again went below the surface of the water early in August. After he had been down one hour and forty minutes he began using the reserve of air in the globe, and by its aid he remained under water four hours and twenty minutes without inconvenience. Just how he propelled the boat is not known, but it was probably by a screw propeller. In 1809, John C. Hamilton, a son of Alexander Hamilton, rode in a stage from New York to Trenton with Robert Fulton. In 1878 he wrote to the Philadelphia Times that "behind the stage Fulton had a submarine torpedo hitched up which he was taking to Washington." The only advantage which the world has received so far from this experiment is the interesting story of "Twenty Thousand Leagues Under the Sea," by Jules Verne.

Before Fitch succeeded in making a success of his steamboat that ran from Philadelphia to Trenton, he devised a system of WORKING OARS BY STEAM.

His engine had a stroke of three feet. It turned the shaft of a wheel eighteen inches in diameter. This was "geared" to an axis so that each stroke of the piston gave it forty revolutions. "Each revolution of the axis," said Mr. Fitch, in a letter dated December 8, 1786, "moves twelve oars or paddles five and a half feet, work perpendicularly, and are represented by the stroke of the paddle of a canoe. As six of the paddles are raised from the water six more are entered. The cranks of the axis act upon the paddles about one-third of their length from the lower end, on which part of the oar the whole force of the axis is applied."

When Fitch finally got around to a successful application of paddle wheels on the sides of his boats, he prepared plans for a steam vessel to be used on the northern lakes. It was to be fitted with two keels. He intended to use this vessel for a ship in summer, and in winter as an ice sledge, with the keels as runners, propelling the craft over the ice by means of spikes in the ribs of the paddle wheels. He wrote to a friend that he believed his ship would attain a speed of thirty miles an hour on the ice. He was evidently unfamiliar with the ice on the northern lakes.

Nathan Reade, of Salem, Mass., a Harvard graduate, had in 1788 learned of the failure of Fitch and others, and decided that the use of oars, paddles, etc., were awkward in practice and wrong in principle. After inventing a vertical tubular boiler, on which he obtained a patent, he invented a "rowing machine," which consisted of a chain with floats, like the floats on an old-style lifting pump, which he placed on two wheels, one at each end of the boat, the lower part of the chain being under the water. When the wheels revolved the floats ran aft under water and the boat was shoved forward.

OTHER DEVICES.

In 1784 James Rumsey, a servant in a Richmond, Va., bathhouse, invented a method of propelling a boat by forcing water by the direct action of steam through an open cylinder placed along the keel of the boat. He undertook to build a boat on that principle in England, but he died before it was launched. His partner finished the boat and got a speed of four knots an hour, but no money out of her.

In 1785 Thomas Jeffers, in a letter from Paris to a friend, described a new method of propelling a ship which he had seen in operation on the Seine. In describing it he said: "It is a screw, with a very broad or thin worm, or rather it is a thin plate, with its edge applied spirally round an axis. This being turned, operates on the air as a screw does, and may be literally said to screw the vessel along." With sagacity he added: "The screw, I think, would be more effectual if below the surface of the water."

A little more than three years after Fulton obtained his patent on the use of paddle wheels, a method of propelling a ship by means of paddle wheels on each bow and on each quarter, was invented. The shafts of these wheels were turned by pitmans and lever beams from an engine placed amidships.

One Jacob Perkins began to solve the problem of steam navigation on the canals by placing two propellers, built like the vanes of a modern windmill, at the stern of a canal boat on one side of the rudder. The propellers dipped only the ends of their paddles in the water when the boat was loaded. They revolved in opposite directions, the shaft of the forward propeller revolving like a sleeve around the shaft of the after one. Their blades were set at right angles to each other. The principal involved in this invention has since been successfully applied to turbine water wheels, but it has never been used in propelling a ship.

Another effort in this direction was made by Benjamin Smith, of Rochester, N. Y. He placed

A PROPELLER WHEEL,

similar to one of those used by Perkins, on the bow of a canal boat. On July 10, 1830,

one of these steamboats arrived at Syracuse. The same device was invented and tried in England. The highest recorded speed attained was six knots an hour. The historian records that this method of propelling boats was abandoned because the wheel was in great danger of damage by driftwood.

Six years after Ericsson, of Sweden, and Francis P. Smith, the Hendon, England, farmer, had demonstrated the superiority of the screw propeller over the paddle wheel, Lieutenant W. W. Hunter, of the United States Navy, took out a patent for a method of propelling a ship by means of an ordinary screw revolved horizontally under the stern of a ship, the action of the wheel forcing the water from beneath up against the inclined stern of the ship above it, and thus driving the ship forward. A small boat called the Germ, operated by such a wheel, was so successful that the Government built a wooden schooner of a thousand tons measurement, which it fitted with a Hunter wheel. The total cost of the vessel was \$172,475. She resembled the new Government dispatch boat Dolphin, in that she was unable to leave the United States coast. She was turned into a receiving ship. Her record was six knots an hour.

Two years after this method of propelling a ship was revived in a different form. A shaft was run directly across the stern of the ship, and a screw wheel placed on each end. The blades of the two screws inclined in opposite directions, so that when they were revolved in one direction, they would throw the water violently against the run of the vessel, and when revolved in the opposite direction they would throw the water away from it. It was found that the swash of the water would shove a common square-toed lighter from four to five knots an hour, and that about fifty per cent of the power of the engine was rendered effective, which was called a good result. No account of the speed at which the propellers would oar her has been published.

In 1880 R. H. Tucker, of Boston, after considering that a sail boat could not be moved in a calm by

FILLING HER SAILS WITH AIR FROM A BELLOWS

located on the quarter deck, decided that he could apply the air better by directing the nozzle of the bellows beneath the water under the stern of the boat. His first experiment attracted much attention. He built a canal boat at Wiscasset, Me., the peculiarity of which was a pyramid-shaped tunnel running from the amidships section of the stern, the opening across the stern being nineteen feet wide. The boat was taken to Charles River, Mass., and there fitted with an eight horse power engine and a common Root blower. The air from the blower was forced down through a shaft to the small end of the tunnel, whence it escaped through the wide opening. The boat was propelled four knots an hour after an engine of thirty-five horse power had replaced the small one. The historian remarks that "Owing to the slight disturbance it caused to the water, it was thought well adapted to the canals."

Another Boston man, John Taggart, has invented a novel method of screw propulsion, which he believes will enable a smooth-water steamboat to travel exactly thirty-seven miles an hour, and that an ocean steamship of the ordinary kettle-bottom model could reach Sandy Hook from Queenstown in four days and twelve hours. On each side of the bow and the stern of the ship are placed strong iron yokes, in such positions that they will support the journals of two submerged hollow iron cylinders of such a size and weight that their buoyancy would almost remove the strain of their weight on the yokes. Beginning at the bow end of each cylinder, a sheet of metal is wound edgewise around each cylinder, forming the threads of what is called a gain screw, or a screw in which the threads are nearer together at the bow than at the stern end of the screw. The inventor believes that after the threads near the bow of the boat have started a column of water toward the stern the long thread will keep pace with it, and thus save what is now lost in slip.

Travellers on the Hudson River Railroad have frequently seen near the track at Hastings a queer-looking object somewhat like a three-wheeled hand car and something like a tricycle, with thick and apparently solid wheels. It is the model of a water locomotive, invented by Robert Fryer. It consists of a triangular frame, twelve feet on a side, resting on three spheroid-shaped wheels, about six feet in diameter and two feet thick. Paddles, about six by twelve inches large, are placed on both sides of the wheels, which will make the wheels take hold of the water when afloat. The wheels are hollow and serve as floats, the machine drawing about one foot of water. Another peculiarity of the wheel is an iron tire or keel, which will enable the locomotive to travel over a smooth roadway or cross a sandbar. The motive power is steam. It is said that the locomotive has actually travelled the roads about Hastings, and that in trials on the water it was steered and handled with the greatest ease. There was little slip when heading a course. The plans for an ocean steamship provided for wheels, would raise the platform thirty feet above the water. On this a house was to be erected, which would have in its basement the machinery, coal and freight. The upper stories were to be fitted up with all the elegance and conveniences of a flat-iron

apartment house, including an interior court, bay-windows, and fire escape porches. The great size and peculiar shape of the craft would make it very steady in a sea-way, and thus the traveler would avoid seasickness. A trifle like low-water would not keep her from crossing the bar and passing quarantine before sunset. Cautious Admiral Preble in his "History of Steam Navigation" says: "If this water car comes up to the expectation of its inventor, it will cross the Atlantic between Sundays." It has not yet reached that point.

Mr. Fryer was not the first to invent the water locomotive, A. B. Blomquist, of Brooklyn, having obtained a patent for a similar machine in 1866. An Englishman also made one which he propelled by his own exertions on the river Tyne the day that George IV. was crowned.

One of the devices for propelling boats which has been invented at frequent intervals from the sixteenth century down to the time when the State of New York offered a reward for a successful

STEAM CANAL BOAT,

is a modification of the foot of a goose, or a shaft with fins on the end of it, which closes when the shaft is drawn forward, and opens when the shaft is thrust aft. Two fatal objections to the fins are that they will not utilize the full power of the engine in showing the ship forward, and they do not afford any means for backing the boat. It was reserved for a Boston man, John McAdams, to make a useful application of fins.

In 1882 he hinged to a small steamboat called the City Point, plying in Boston harbor, a metal fin, four by five feet large, on each side of the stern post below the water line. These fins are ordinarily closed in on the run of the steamboat, where they look like closed ports. Wishing to stop the steamboat the officer of the deck pulls a lever, which releases the catch that holds the fins in place, and a spring instantly swings them out into the water, the force of which opens them until they stand at a right angle with the keel. In this position they are held firmly by steel braces. Then they present a flat surface of forty square feet to the water. In actual service the boat, when going at full speed, was stopped within a space of ten feet. One fin only can be opened when desired, thus not only checking the forward motion of the boat, but throwing the stern suddenly to one side. The boat receives a smart shock when both fins are opened.—*Brooklyn Eagle*.

FINING TUG OWNERS.

The owners of tugboats who assumed the risk of carrying passengers on the Fourth of July, or rather took the unblushing(?) liberty of treating a few friends to a short ride on the lake, have been heavily fined by the local inspectors, Messrs. Warren and Moore. Ever since the national holiday a perfect stream of complaints have been rained down upon them by the masters and owners of pleasure yachts who were on the lookout for tugs leaving the harbor with passengers. Of course these complaints had to be investigated, and as a majority of them were admitted to be true by the persons complained about, a number of fines were imposed. The tugs W. H. Wolf, Mariel, Monitor and J. H. Hackley were among the boats mulcted and in each case the fine imposed was \$500. Of course these fines will never be paid, as enough influence will be brought to bear on Secretary Folger to secure their remission. In a decision of the United States district court of Boston, the local inspectors at that port fined a tug owner \$500 for carrying a number of men from one point to another in the river. The owners showed that they had not accepted any remuneration for fare, and the court held that the passengers had to be considered a part of the tug's outfit. As none of the tugs fined recently received fare from their guests, they will come under this decision, and are bound to be discharged. Right here, however, a bit of advice might be given to tugmen. As a rule they are humane, practical men, and withal good sailors. They know when a boat is well handled and properly loaded. With these advantages they could watch the small pleasure craft, and would have no difficulty in showing every day that they are criminally overloaded with human freight.—*Inter Ocean*.

IN A NEW FORM.

The steambarge John E. Potts is in port from Barryville, Lake Superior, with a load of lumber. With her present name, and many changes in her appearance, the Potts, will probably leave port and very few persons will recognize her as the famous old passenger steamer Mohawk, which traveled the route between Buffalo and Chicago in the fifties. It is the revised edition of the Mohawk, rebuilt and supplied with a new name and new machinery. To the old-timers the Mohawk is as well known as the port where she was built. She was originally built for the Western Transportation Company, and after her launch it was thought that her immense(?) size would prevent her from being successful. But she was. The Mohawk was burned almost to the water's edge about fifteen years ago, and her machinery was taken out of her and her hull converted into a tow barge. Last winter she was hauled out at Oscoda and rebuilt, new machinery placed in her, and her name changed.—*Inter Ocean*.

BRADLOCK'S POINT LIGHT.

Having an opportunity to visit the harbor of Charlotte (Genessee river) a few weeks ago, we strolled down to the beach on a beautiful evening to look at old Lake Ontario, which laid out stretched before us like a perfect mirror; it being perfectly calm and not a ripple visible as far as the eye could reach, the sun just setting in the western horizon of the lake, made a natural panorama most beautiful to behold.

We walked out on the pier to the new lighthouse lately erected, and in scanning that famous structure closely, we came to the conclusion, that whoever planned and recommended the same knew very little about what actually is needed at the entrance of such a harbor.

The question arose in our mind at once, how will such a beacon be able to withstand the heavy seas that sweep in from the lake when our heavy northeast gales occur in the fall? We will venture to predict that some morning the pier light at Charlotte harbor will be found on the beach utterly demolished, and nothing left to mark the entrance either by day or night, as the old lighthouses have been discontinued.

We are not alone in our opinion about this matter; many experienced lake men are ready to substantiate our assertions in regard to it.

About a couple of years ago \$30,000 was appropriated by Congress to erect a new lighthouse on Bradlock's Point; nothing has been done about it, and there is no sign yet that anything will be done in regard to the building of such a structure.

Permit us here to remark that we don't want any light on Bradlock's Point at all, but let a light of such a kind, as \$30,000 will build, (for it ought to be a good one) be erected in Charlotte and so constructed and placed as to form a range light with a substantial red pier head light on the outer end of the west pier; that is the way it should be done in order to be of any practical use whatever, and to make the entrance to the harbor of Genessee, easy at all times and in any kind of weather. A light of that kind would also be visible a long distance off in the lake and would be a guide for vessels and steamers running up and down at night as it was years ago when the old light on the hill at Charlotte was in vogue, but which has of late been discontinued for reasons hard to tell; but we suppose on account of saving oil and the mania of economy has at present shown itself to its fullest extent at Charlotte in the way of extension of piers as well as lights.

Late years a considerable coal trade has sprung up at the harbor of Genessee, on Lake Ontario and the largest steamers coming through the new Welland canal after leaving St. Lawrence river on their return trip call there for coal for upper lake ports and we therefore think it is just as necessary to have the entrance to that harbor supplied with good lights as either of the two Sudas; in the meantime we will patiently wait, and hope that after a considerable lot of costly red tape has been unravelled, something will be done in regard to the matter. In conclusion permit us also here to say that if those in charge of such work would most graciously condescend to consult with old experienced lake captains, who have for years been running for these lake harbors in all kinds of weather and dark stormy nights, some very valuable information might be obtained, before such miserable traps as the pier lighthouse at Charlotte would be constructed.—*Sailors in Ogdensburg News*.

TO THE WHITE MOUNTAINS AND SEASHORE.

A series of three grand excursions via the Bee Line, C., C. & I. railway, July 29th and August 13th, to Niagara Falls, down the beautiful St. Lawrence river, and taking in all principal points of interest in the mountain regions at the lowest rates. For particulars ask ticket agents of C., C., C. & I. Ry., or D. U. R. R.

NAUTICAL NOTES.

The steambarge S. D. Caldwell's name has been changed to Louie O'Neil, after a young lady in this city.

The steambarge City of Concord and consort has gone out of commission on account of low rate on lumber and salt.

William Sanjule, of Tonawanda, one of the builders of the original Maid of the Mist, has contracted to build a boat 125 feet by 28 feet in dimensions for Wilson parties.

The amount of lumber received at Tonawanda since the opening of navigation will exceed the amount received during a similar length of time last year by over 20,000,000 feet.

Captains of grain vessels arriving down from the canal lately have been considerably disappointed in finding they have to pay full canal tolls upon entering the canal. A circular issued by the Department of Inland Revenue, dated June 4, reads: "The collector of canal tolls on the Welland Canal will continue to charge the full rate of tolls, and the reduction will be paid by the department as a refund upon evidence being furnished by the shippers that the conditions required by the orders in Council have been complied with."



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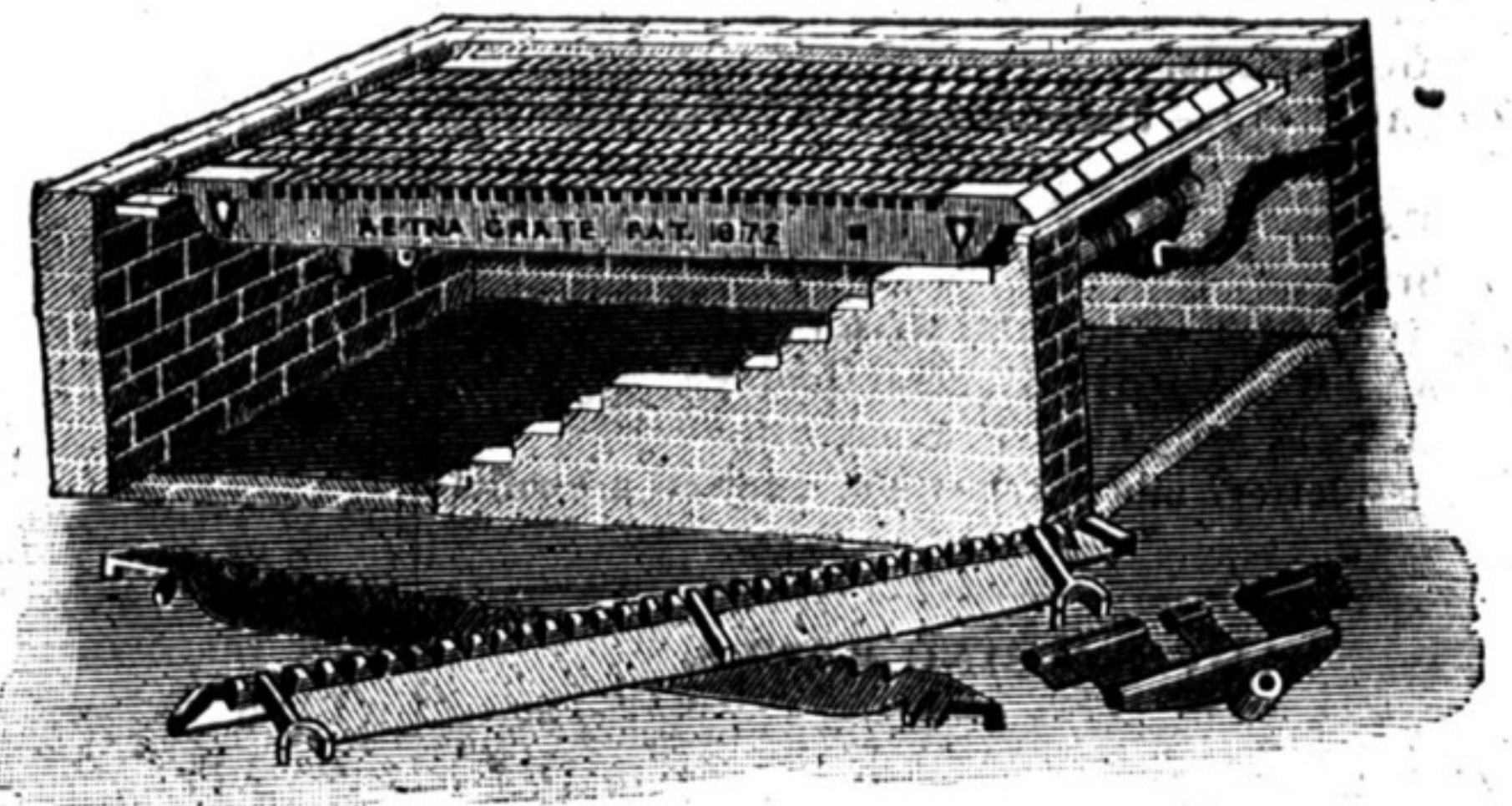
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Length over all 51 3-10 feet, breadth 13 3-10 feet and depth of hold 6 feet; draws 5 1/2 feet of water; measures 9 24-100 (new) tons, and 18 24-100 old. Built in 1880 and rebuilt this spring, new deck frames and cabin, and machinery thoroughly overhauled. Engine is 14x14, boiler 8 1/2 feet long and 4 8-12 in diameter. Warranted in No. 1 condition and subject to inspection. Price, \$3,800. Address MARINE RECORD OFFICE.

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STEAMBARGE MILWAUKEE.

Her length is 135 feet, beam 26 feet, and hold 10 feet 10 inches. Boiler 17 feet long, 7 feet diameter; three flues, two 16 inch and one 17-inch. Engine 24x42. Carries 240,000 feet of lumber. Speed, 11 miles light, and 9 1-2 loaded. Insurance valuation, \$46,300. Address MARINE RECORD OFFICE, No. 144 Superior street, Cleveland, O.

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Dimensions of hull 65 feet over all, 16 feet beam, 8 feet hold, and measures 46 tons with 7 feet draft; can be made 6 feet draft. The engine, 18x20, is in first-class condition, with all new brasses, new rings in cylinder and turns a six-foot wheel, which was new last season. The boiler is one year old, is large enough to burn wood or coal and is allowed 100 pounds of steam. Price \$4,500, and must be sold inside of thirty days. Address MARINE RECORD OFFICE.

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The Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building.]

A. A. POMEROY, Editor and Proprietor.

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CLEVELAND, OHIO, THURSDAY, JULY 17, 1884.

LIABILITY OF DRYDOCKS.

A case of great interest to vesselmen was decided in the United States District Court, Eastern District of New York, July 23. The Norwich & New York Transportation Co. libeled the New York Balance Dock Co. to recover for damages done to the steamboat City of Boston, while being raised by defendants upon their balance dock. We condense the decision rendered by Judge Benedict in the case. The defendants agreed to raise the boat and hold her until repairs could be made, but when the dock had been raised almost to the surface of the water she fell from the blocks and received serious injuries, which the libelants charge to negligence. The answer of the defendants admits the agreement to raise the boat but avers that they prepared the dock according to the instruction of the libellant; that all was done skillfully and approved by the libellant. It also avers that the boat was in an unfit condition for raising, of which the defendants were ignorant, and that her fall and consequent damage was caused by carelessness of libellant and her condition. The judge says that none of the points of the answer damaging to libellant's case were sustained by the testimony. The points as to her condition would avail nothing, as drydocks are conceded to be made and used for the purpose of raising boats not in sound condition. The skill of those working them must be commensurate with their unsoundness. In this case the boat was dismantled, her walking beam was out, her engine was out of position, and the known object in having her raised was to bolt down her engine keelsons. A failure by the defendants under such circumstances to be informed in regard to the actual condition of the boat does not constitute a defense. Ignorance under such circumstances was itself negligence. Libelants applied to have the boat raised high enough out of the water to enable bolts seven feet long to be passed up through the bottom and the engine keelsons without being bent. This elevation was unusual; in fact no boat, so far as appears, had ever been raised to such a height upon this or any other floating dock. The judge regards the manner of placing the blocks under the boat as of the utmost importance, and upon it mainly bases his decision. Two methods were equally well known to the dock owners, though they had never employed but one. The one used by them was that of using single blocks of timber one upon the other. The other is what is known as cribbing. After the steamboat had fallen she was raised again, by cribbing the blocks, successfully, and the judge says that not only they, but all drydock men, know that by cribbing all danger of falling is avoided. The former style was used in this instance, the blocks dogged together. As the dock rose the keel of the boat took the blocking, then

the boat rose with the dock until the keel was four or five feet out of the water, when the boat and blocking on which it was resting toppled over and the boat fell heavily upon the floor of the dock. None of these facts being in dispute the Judge next points out the extent of the responsibility, assumed in the attempt to raise the boat, and the legal relations of the parties naturally and justly resulting therefrom. He holds that the vessel when injured was under the exclusive control of defendants and drydock owners should be held to a high degree of responsibility as regards the management of his dock. It is something in the nature of that of a carrier in respect to goods entrusted to him to be carried, but the judge does not rely upon this hypothesis in reaching his decision. A refusal of employment made by a dock owner, without cause, would in a majority of cases work irreparable injury and be unjustifiable. Docks must be operated by those who own them, and their condition and capacity are unknown except to the owner. Ships in stress are often obliged to be trusted to them by the master without consultation with owners, and the vessel may be of much greater value than the dock, where defective skill and lack of care may result in serious loss. The employment of the drydock owner is, therefore, confidential, and is one to which public policy and the law should attach a high degree of responsibility. Within the range of this comes a sufficiency of the blocking upon which the vessel rests, the obligation to provide which naturally attaches to the dock owner, as he only knows the action of his dock when rising under the burden of a given ship. Had the blocks been cribbed the accident would not have occurred. The case was not that of the giving away of the blocking through some latent defect. The boat fell because the method adopted rendered the blocking unstable when subjected to the weight of the vessel. A number of analogous cases, or cases as nearly related as possible, are cited, and which are worthy of consideration. In the case of a ship which broke from her moorings and damaged another by drifting upon her, it was held by the Supreme Court of the United States that to escape conviction of negligence the master of the drifting ship must show an accident which human skill and precaution could not have prevented; the court expressly declared that belief in the sufficiency of the ship's fastenings was no defense. We call special attention to the principle involved in this last declaration. Logic certainly must define an accident which could by no possibility have been foreseen. A weak cable, a defective tow-line, or an unskillful estimate, or guess, as to the strength of these, can not on this account be defended by law. When these points are properly understood and acted upon fewer occurrences wrongly called accidents will take place.

COAST LIGHTS.

There seems to be a reasonable call for electric lights on our lakes as there certainly is on the sea coast. French and English authorities agree that it gives far greater security than oil. It costs more but that is not a sufficiently weighty consideration to determine the question upon. The loss sustained in the destruction of one vessel is greater than the cost of a system of electric lights over and above that of oil. As to efficiency, the establishment of an electric light tower on Hallett's Point, L. I., shows that matter to be equally beyond dispute. It is said that in a well ordered system of oil lights, the ranges or circles of visibility, estimated at from ten to twenty miles, intersect each other, so that before a ship loses one light she makes another. But this is only in very clear weather. When thick or foggy weather prevails all is uncertainty. Vessels have been known to run ashore almost at the foot of a light tower without seeing the light; while instances are by no means rare where the intensity of a first order light was so weak that masters have demanded what ship it was—mistaking it for a steamer's white light—and almost immediately thereafter run upon the reef on which it stood. A "fixed" oil light will often, when thick weather prevails, be mistaken for a "flash" light, owing to an occasional partial lifting of a fog. We had

an instance of this only a few weeks since when a steamer ran ashore at Amaganset, L. I. It was for a time supposed that the electric light had a shorter range of visibility in thick and foggy weather than the oil light because of its whiteness, but the experiments made on the English and French coasts showed that the contrary was the case, or rather, that the intensity of the electric light is so much greater than that of the oil lamp that its piercing power is multiplied. During the French inquiry navigators testified that, save when the fog was unusually thick, they could find their way into a harbor at night by the aid of the electric light towers along the coast. French naval authorities have found that an electric light costs but little more than oil, considering its intensity. The extra cost is a mere trifle compared to the safety attained.

THE Oswego Times says the first regatta of the lake yachting association, which is set down for July 30, will be one of the most important yachting events which ever took place on Lake Ontario. It is the design of the committee to offer about \$500 in prizes and to omit nothing which will make the occasion a successful one. It must be understood that all the large yacht clubs on both sides of the lake are members of the association and this race will bring out the large and fast Canadian yachts. Among others, will be the cutters Aileen and Verve of Toronto, which are models of the cutter class and such cutters as our citizens have never seen in a race. The handsome yacht Zeta has lately joined the Oswego yacht club and will take part in the race and it is reasonably certain that the Iolanthe and Norah of the Bay of Quinte yacht club will be in the race. Of course such a race as this cannot be sailed without money and the committee of our club are already busy in raising the required funds. A subscription list has been started and all interested in yachting will be expected to contribute liberally. The gentlemen who have the matter in charge will not allow any failure in this matter and will see to it that the race is a successful one. It will be over the club course and will be sailed under the rules of the Senkawanka yacht club.

SOME weeks past we gave in these columns quite an elaborate admiralty opinion by Judge Blodgett, United States District Court, at Chicago, in the collision case of Jacob Johnson, owner of the schooner E. M. Portch, against the steambarge Leland, in which the court found a verdict for the Portch in the sum of \$16,722. The Portch, previous to being run into and sunk by the Leland, had been in collision with the schooner Negaunee. The owners of the Portch brought suit against that vessel and secured a verdict by jury trial. Judge Blodgett has, however, reversed their finding and rendered an opinion that both schooners were equally to blame in the matter and must each bear individual damages. Messrs. H. W. Magee and C. E. Kremer appeared for the Portch, and Mix, Noble & White, of Cleveland, and W. H. Congdon for the Negaunee.

THE Pulaski Democrat says that Captain E. M. Smith, well known to many of our readers and commanding the steamer, City of Fremont of the Lake Superior South Shore Line, is now on his twenty-fourth year of service. He writes us that this is to be his last year on the lakes, and that he will at the close of the season retire to his ranch in Southern Nebraska. We hope Captain Smith's closing years may be many and prosperous.

A CARD OF THANKS.

To the Editor of the Marine Record:
Knowing that your paper reaches most of the marine men I would most respectfully ask you to place in it a card of thanks to the many friends and companions of my late husband, who have so thoughtfully and manfully come forward and paid the funeral expenses, also their kind donations to the family. If they only knew what good they have done they would feel well paid for their kindness.
MRS. JOHN PEREW.

The tugs Beatrice, Haight and River Queen, after twelve hours' work, took the steambarge Tecumseh and barges off the head of Hog Island.

OBITUARY.

Regarding the death of Edmund Anderson collector of customs at Amherstburg, Ont., which occurred on the 8th inst. for the past thirty three years the Echo says. Mr. Anderson was born in Golspie, Sutherlandshire, Scotland, on July 11, 1822, his father being a physician there. In 1830 his family removed to this country and settled at Picton, N. S. Shortly after attaining his majority, deceased removed to Montreal and went into the commission business there with his brother Charles. In 1846 he was appointed landing walter at Fort Erie, when Col. Kirby was collector there. He was subsequently landing walter at Windsor and surveyor at Fort Erie. Upon the death of the then collector, Francis Caldwell. In 1851, Mr. Anderson was appointed collector here and has continued to steadily discharge the duties of the office without an intermission since that date. He was married in Montreal, in 1849, to Miss Eugenie Morin, daughter of P. H. Morin, who was then harbor master in that city. Two sons—P. Hector, manager of the G. N. telegraph office here, and Edward J., of the C. S. R., service in Petrolea—and one daughter married to Mayor Francis Cleary, of Windsor—survive him. One son—Charles—died three years ago. Five brothers and four sisters of deceased are still living. One brother, Charles E. Anderson, is in the insurance branch of the finance department at Ottawa, while three others, among them Dr. Walter D. Anderson, are in California. The funeral took place from the family residence, Thursday forenoon, to the Episcopal Church, where a funeral service was held by the Rev. A. S. Falls, and thence to the cemetery, and was attended by a large number of friends from Windsor and Sandwich, as well as from this town. The pall bearers were Mayor McGee, ex-Mayors Kolfrage and Twomey John Bell, S. E. Martin and Wm. Johnston. Deceased was very conscientious in the discharge of the duties of his office and had the full confidence of the heads of his department during the whole of his long period of service. As a citizen he was much respected, and was, for fifteen years, a member of the Public School Board, during 12 of which he was chairman. He was a good husband and kind father.

LIGHT IN MAUMEE BAY.

Notice is hereby given that on and after August 1, 1884, the following ranges will be established to mark the deep water channel through Maumee Bay, Ohio:

The station consists of three fixed white lights. A keeper's dwelling and a buoy house, painted white, stand upon a crib at the turn of the channel. One of the lights is placed upon the buoy house, 27 feet above the water level; the others are shown at an elevation of 43 feet above the water from iron shafts, painted black, standing upon cribs situated, respectively, 1,000 feet northeast and 1,000 feet south of the keeper's dwelling.

Vessels entering the bay will keep the light shown from the top of the buoy house on main crib (which is on the south bank exactly at the elbow of South and Long reaches) in range with the light shown from the shaft south of it until abreast of the main light, and then take the other shaft light in line with the main light.

By order of the Lighthouse Board:

STEPHEN C. ROWAN,
Vice Admiral U. S. Navy, Chairman.

KINGSTON.

The shipments of iron ore will begin at Belleville next week.

The steamer Utica has been leased by the Rathbun Co. to take the place of the Pilgrim on the route between Deseronto and Napanee. The Pilgrim is engaged towing logs on the Shannonsville river.

The steambarge Saxon ran into the schooner Ocean Wave at the Stone Mills a few days ago, carrying away her jibboom and bowsprit and tearing up all the upper works near the bow.

The new steamer St. Lawrence now presents a handsome appearance. She will make a few trips before receiving the designs for the paddle-boxes.

The schooner Erie Queen, which sank near Brockville with a fifteen thousand bushel cargo, has been sold. The cargo was purchased by Buffalo parties, and the vessel by Hall, (of Ogdensburg,) Merriman, et al. The vessel is said to be worth little, as she is said to have spread about three feet with the grain.

The City Engineer has made an estimate of the cost of repairing the King street breakwater. He purposes to build it up with stone, and place a lamp on it. It appears that the government, by recent legislation, have given the residents opposite the breakwater a prior claim on the property, and that the city will have to get the consent of these residents before improving the property.

DETROIT.

Special to the Marine Record.

July 15—The United States revenue steamer W. P. Fessenden, which makes her headquarters here, took her departure a few days since, as has been her usual custom, going west, presumably to Lake Huron, yet no one save those on board knew of her destination. On Thursday following her departure a dispatch announced that she had sunk the day previous by striking a reef while endeavoring to enter Prentiss Bay, at the upper end of Lake Huron, eight miles west of Detour light. This is the first mishap she has met with since in commission. The tug Peck, from the Sault, with wrecking apparatus, went to her rescue, and was soon after joined by the revenue steamer Andrew Johnson, from Lake Michigan. On Saturday she was raised in a badly damaged condition. She is now en route to this city, it requiring the services of two steam pumps to keep her afloat. She may possibly arrive before the close of this communication. Hugh McGaw, a well known lake captain, is the pilot of the Fessenden. When she arrives more definite particulars regarding the cause of the disaster will be received.

Quite a sensation was created a few days since, by a Chicago paper announcing a race between the propeller Philadelphia and the H. J. Jewett, between Chicago and Buffalo. It was stated that both steamers left Chicago at one and the same time, and of course every one along the Detroit docks were on the qui vive to witness their passing this point. It proved a hoax until after the Philadelphia had passed and the buncombe that had been originated soon melted away.

The tug Sweepstakes met with a slight mishap while on Lake Michigan, coming east with a tow, by the breaking or bursting of her brasses. The tug Crusader was near at hand and took both the tug and her tow and brought the vessels through and the Sweepstakes as far as the St. Clair river, when she came on herself. After reaching here she was ready to leave again in two hours' time.

The passenger traffic on all the steamboat routes from here are doing a fair business, notably to Mackinaw and Lake Superior. It could not well be otherwise, as no finer pleasure routes are to be found on the continent for those desirous of escaping the heated term of the season. Freights are somewhat inactive.

The steamer Atlantic, of Grummond's Mackinac line, while coming up the river on Saturday, near Malden, broke her machinery and was towed up to the city by the steambarge Oscoda. This will oblige the Atlantic to lay over one trip for repairs.

The tug Gladiator, while on Lake Huron en route to Tawas on Saturday, found a raft adrift which had broken loose from some tug. It was of good size and in good order. It was taken into Tawas, where it was ascertained that it belonged to N. Mills, of Port Huron, who was notified of its recovery.

The Detroit Drydock Co., notwithstanding the dull times among the shipping, have kept up a steady routine of repairing with but little or no diminution in their force of men. Accidents will occur from some cause or other and "he who dances must pay the fiddler" is an old and trite saying and will apply to vessels as well as other matters.

The Propeller Pacific passed this way on Saturday with a tow of barges en route to Cleveland in a damaged condition, caused by a collision in the Sault river. She there met the Canadian steamship Alberta, bound for Port Arthur. The latter blew a whistle indicating she would pass on the starboard side, which was responded to by the Pacific. But contrary to this, the Alberta ported her wheel, a reverse of the rules, and the collision followed. The latter was considerably damaged, and being an iron hull will doubtless come to Detroit for repairs.

Nearly all the larger class of tugs are engaged in rafting, which is a better paying business than travelling from three to five hundred miles in search of a tow of vessels.

There has been but little or no deviation of freights at this port. A cargo of wheat was shipped on Saturday to Ogdensburg at $4\frac{1}{2}$ c; the Atmosphere, wheat, 8,000 bushels to Cleveland at $1\frac{1}{2}$ c and return with coal to Detroit at 35c; lumber from Oscoda to Detroit, at $1\frac{1}{2}$ c. Two cargoes of timber

for Liverpool are being put on board of a steam and a sail vessel which, on arriving on Lake Ontario will be rafted to Quebec, thence by ship across the ocean. But one cargo of staves has been shipped for a month past, and this at old rates. Captain Charles Hanscombe has the charge of this branch of shipping from this port, and he does it up well.

The Canadian tug Beatrice is picking up the odds and ends of a raft which became broken up a few days since between Pidgeon Bay and the Rond Eau while in tow of the tug Moore.

Rafts are passing this point almost daily, but they rarely, if ever, contain more than 2,000,000 feet, although a Detroit paper has twice asserted that the John Owen had two rafts, in each of which there were three hundred million feet.

Occasionally a tug from the lower extremity of Lake Erie wends this way, driven presumably by starvation to gain a livelihood in strange waters.

The steambarge Geo. A. Marsh, at present under charter by the Government, is carrying supplies for the new light house at Point Monyear.

The tug Champion passed down on Saturday with a tow of four vessels, the net tow bill amounting to \$694. She brought them from Escanaba, and the distance traversed was over 500 miles. Tugs have seen better days than these, notably when freights were 25c per bushel on grain between Chicago and Buffalo. But we shall see no more of them and like the lake and ocean traffic, that sun has set for all future time.

The Canadian steamer Celtic with supplies for western lighthouses is on her passage through the rivers and straits with a number of Lake Ontario excursionists on board. She visits all points on Lake Superior.

The bodies of all three of the young people who were drowned from a small boat a few days since at Sandwich, have been recovered. They were out on a pleasure lark, but unfortunately were unacquainted with handling the craft and their lives were sacrificed. Three were young men and two young ladies.

Last evening the scow Mary Alice, lumber laden for Detroit, was capsized by a squall on Lake St. Clair, but fortunately the crew saved themselves by the small boat. Today (Tuesday) the tug Hercules, well equipped, set out for the distressed craft and will bring her to this port. Her deckload of lumber will be the principal loss.

The schooner Smith & Post has just made the round trip between Detroit and Alpena in four days. It never was beaten.

The steamer Fessenden has arrived in this port from Detour, where she was taken by the tug Peck and revenue cutter Johnson after being released from the rocks in Prentiss Bay. The Fessenden came by her own power and did not receive assistance from any craft on the way. A sail was placed over the hole at Detour and the two pumps kept her free and comparatively easy on her way here. The steamer has been placed in the Springwells drydock and the water was pumped from her to-day. On the starboard side a long rent is made, extending over sixteen frames, and in places the rent is six inches wide. There is a small hole on the port side, caused by the steamer listing over and resting on a boulder after she filled. The officers of the steamer deny that the bulkhead doors were open at the time she struck. The hole on the starboard side is partly on the forward airtight compartment and the part of the ship between that bulkhead and the collision bulkhead. The officers admit that the doors of the forward bulkhead were open, but the steamer would have sunk if they had been closed, for the hole was right under it. The bulkheads aft were nearly two hours filling up, the water coming into them from around the water pipe which passed through. It is not certain that the steamer will be repaired here, and there is some talk of taking her to Buffalo. The damage is about \$5,000.

Henry Howard, president of the Star Line of steamers, W. K. Muir, Vice president; A. N. Moffat, manager, and several of the members of the board of directors will visit New York to examine the Hudson river steamer City of Bristol, with a view, if the inspection proves satisfactory, to build a similar steamer to add to the Star Line. The

City of Bristol is an iron steamer, and it is the intention of the Star Line Company to build their boat of iron also, providing satisfactory terms can be obtained. An informal bid for the contract has been received from eastern parties offering to duplicate the City of Bristol for \$150,000, but the company prefer to give the contract to a shipbuilding firm on the lakes, all things being equal. J. W. H.

ESCANABA.

Special to the Marine Record.

The Countess, of the Chicago yacht club, anchored in our bay Wednesday morning and will cruise in our vicinity the coming month. Captain Hammer, Sr., is sailing master of the yacht Countess, now in our waters. The party on board, Mr. C. J. Smith, of Chicago, and friends, have a camp up the bay and divide the time between that and the yacht; fish and hunt alternately.

The keeper of the Poverty Island light, Mr. Charles Herman, was in town on Wednesday, after the necessities of life, so he says, but I am inclined to believe more for the purpose of showing his new uniform of the lighthouse service. It is tidy; navy blue cloth and gilt buttons, and we are all anxious to see the keeper of our home light, Mrs. Captain Terry, arrayed in her new uniform. Wonder how it will become her?

The Delta Transportation Company, which owns the steamer Minnie M., has purchased of Miller & Christie, of Chicago, the Lady Washington, of the Bay de Noquet Company, and has been withdrawn from the route between here and the ports on the Big Bay and laid up, leaving the Minnie M. in possession. She will be put in order, painted, etc., and a route found for her, or a purchaser.

Over a million tons of ore have gone out at date of report, of which 664,074 tons went from Escanaba and 147,838 tons, more than a tenth of the whole, from the Chapin mine.

The Beaufort mine, Marquette district, promises to be a very valuable piece of property for the lucky owners, and sometimes a mother-in-law is, after all, not to be despised, especially when she "departs in peace," and leaves a share in such a mine to a mourning son-in-law, who, it rumor is correct, resides on Lorain street, your city, and actually intends to invest part of his inheritance in erecting a monument over his departed mother-in-law, as a solemn reminder that there are exceptions, even in a mother-in-law.

On account of celebrating the 4th and attending circus, which took the miners a full week to get through with, very little iron ore could be shipped from the mines the past week, and consequently, our harbor is full of craft waiting for cargoes. However, that can't be helped. The 4th must be celebrated, and circus day comes only once a year, and cousin Jack will not deprive himself of his pleasure, not even for the whole fleet of Great Britain. E. G.

BUFFALO.

Special to the Marine Record.

Coal freight which have ruled steady and firm since May at 80 cents to Chicago and Milwaukee, dropped yesterday to 75 cents.

While lying under the breakwater, the tug Compound caught fire under the pilot house. Captain Napier, who was on the breakwater, hurried aboard, and got the tug's pony pump at work, a stream from which soon put the flames under control. The life-saving crew, who are always on the lookout for trouble, quickly launched one of their boats and rowed to the burning tug. Under direction of Captain Williams they assisted materially in quenching the fire. The Compound was towed into the river by the James Ash, Captain Tom Doyle, which at once went to her assistance. The damage amounts to some two or three hundred dollars, and is covered by insurance.

The contract for building the new Maid of the Mist has been awarded to George Notter, of Buffalo, so that she will be an American boat. She will be 65 feet long and sixteen feet beam, having a hurricane deck and cabin, and will be able to carry 150 passengers. A dock is to be built at the foot of the inclined railroad in the Niagara Park, and also directly opposite on the Canadian side, at a point where the original Maid of the Mist used to land. She will be a screw steamer, driven by a forty-horse power engine, and it is expected that she will be completed next June. A. E.

DULUTH.

Special to the Marine Record.

The steamer Wallula of the Wilson Transit Line, cleared for Sarnia on the 10th with the largest cargo of flour that was ever loaded in any lake port, if not the largest load of flour ever loaded in any vessel, having on board 18,900 barrels of flour on a draft of thirteen feet eight inches and fourteen feet. The same was loaded in about twenty-two hours by a crew of thirty-two men, she being the most convenient vessel to handle flour ever in this port. She had room for 2,000 more barrels, but the draft of water in the slip where she loaded was not deep enough. It is the purpose to dredge the slip before she returns so she can take a full load. Captain Thomas Wilson, owner of the Wilson Line of steamers, was in town, and it is rumored that he is about making a deal with the St. Paul & Duluth railway to put in two or more of his large boats, to carry the vast amount of flour which is accumulating at Duluth to Sarnia in connection with the Grand Trunk railway, having for return cargo coal from Toledo and salt from Saginaw.

The Grace Grummond, brought to Duluth last spring and put on the Two Harbor route, was recently laid up for repairs, the matter being a broken crank pin. She has since changed hands, having been bought by Captain Joseph Lloyd and Joseph A. Manheim, and will continue on the Agate Bay route.

The St. Paul & Pacific Coal Company, of South Duluth, has leased a portion of Culver's dock. The necessary improvements were commenced immediately.

Commodore Wilson's new propeller, the George Spencer, just launched at Cleveland, is named after George Spencer, of the Lake Superior Elevator Co., of Duluth.

The Canadian barges Kincardine and A. H. Morrison are here, both undergoing extensive repairs.

Coal charters from Buffalo to Duluth are 80c; to Port Arthur, $1\frac{1}{2}$ c. B.

MILWAUKEE.

Special to the Marine Record.

The steambarge Mary Mills blew out her cylinder head and broke her crank when off Big Point Sauble. She was picked up by the steambarge Hilton and towed into Manistee and the tug Wheeler brought her here.

The tug Jesse Spalding, of Sturgeon Bay, arrived on the 13th to go into dock to repair damages sustained by going on a reef in Green Bay.

Chief Engineer Riker, of the Tacoma, was arrested on the 12th for assaulting his fireman, Charles Bradley. He was bound over for trial at the October term of United States Court.

Richard Davis, of Milwaukee, has been awarded the contract for building the new boiler of the revenue cutter Andy Johnson. The boiler is to be 33 feet long and 9 feet in diameter. Mr. Davis' bid was \$6,780 for an iron boiler and \$7,200 for a steel boiler, and \$200 additional for taking out the old boiler and putting the new one in place. It has not yet been decided whether to have the boiler of iron or steel.

MARYSVILLE.

Special to the Marine Record.

The propeller Point Abino blew out the joint of her cylinder head on Lake Huron Friday night. She will not be able to leave for Cleveland until Tuesday night.

The propeller J. E. Mills is loading here for Cleveland and she leaves Monday night. She has received a new coat of paint this trip and looks well.

The steambarge Tecumseh got her tow of barges on the head of Stag Island, Saturday night. She has worked all day with the tugs River Queen and W. A. Rooth and they got them all off but the barge Cameron and have commenced dumping her deck load of lumber in the river to lighten her. All were loaded with timber.

TOLEDO.

The following charters are reported yesterday: Scow W. R. Hanna, coal to Chatham, 55c; scow German, coal at St. Clair, 40c; schooner Herbert Dudley, coal to Owen Sound, 60c.

Henry Barnes, director of the Erie Boatmen's Transportation Company, has returned from the east and reports canal business as exceedingly dull.

"NO DAMAGE THAT CAN BE INSURED AGAINST WILL BE PAID FOR."

Every day brings additional evidence of the need for a new bill of lading. Bills of lading now in use contain too many clauses. In one sense they are really no more than a receipt for goods, so many are the exceptions against any chance of claims upon the ship. They are intricate in phraseology and can now scarcely be called an equitable contract as between shipowner and cargo owner. Indeed, many of them read like the cunning devices of a shrewd lawyer to relieve his client of all responsibility. As long as cargoes are delivered safely these clauses attract little attention and shippers accept bills of lading as drawn by the ship because it is impossible to do otherwise. But there is a growing desire to change this unsatisfactory manner of conducting business. We have had occasion several times to call attention to cases in which exceptions were taken to clauses in bills of lading as unjust and where the courts have sustained the exceptions. Another case of this kind has just been settled in the United States circuit court in this city. In this case exception was taken to a clause in a bill of lading to the effect that "No damage that can be insured against will be paid for." Through the fault of the vessel issuing the bill of lading goods were damaged and the vessel refused to pay for the damage, taking defence under the clause above mentioned. Such a defence virtually leaves the shipper without any relief. Upon the principle that a contract is a contract, how one sided soever it may be, the carrier would be free from all responsibility for his own neglect.

Bills of lading are full of just such clauses. The courts, however, are not at all disposed to view these clauses leniently, but are condemning them as being opposed to public policy. In the case cited above the learned judge holds that if the clause "no damage that can be insured against, etc." is to be taken in its literal meaning it "is obnoxious to public policy, and therefore void." He calls attention to a rule of the federal courts which ship owners should constantly bear in mind that "If a carrier would refuse to carry unless promises were made to him that he shall not be charged with any miscarriage, that promise is void." Now it is patent that the carrier does exact just such promises when he leaves no alternative to the shipper but to accept the carrier's bill of lading. Judge Wallace says that, while the carrier may stipulate for reasonable modifications of his common law liability he cannot exempt himself from the consequences of his own negligence, or that of his employees. In fact the carrier cannot escape from his public duty, all contracts and stipulations to the contrary notwithstanding. In view of this it seems absurd to continue the old clauses in bills of lading which have this purpose, and to continue inserting new ones whenever some point is discovered which the carrier thinks will be an additional loophole for safety against claims. It was evidently thought that by inserting the clause "no damage, etc.," the shipper was pointed out a way for protecting himself and at the same time the carrier was relieved from the consequences of his own acts. This might do as between the carrier and shipper, but it would not be fair as to the insurer and it would be detrimental to public policy, an essential consideration in all such matters. As Judge Wallace points out a shipper may, by arrangement, give the carrier the benefit of any insurance which the shipper may have effected upon the goods. He cannot, however, be forced into making such a contract, which is practically done when the clause under discussion is insisted upon in the bill of lading. Clauses may be most subtly drawn to relieve the ship from all responsibility. But late decisions sustain Judge Wallace's conclusions where he says, in speaking of a certain case, "the contract released the carrier from 'all claims on account of any damage or injury to the property from whatever cause arising,' but it was held that the exemption did not include an injury arising from the carrier's negligence."

After all is said, it is evident that a fruitful crop of law suits seems to be one of the chief results of many clauses in bills of lading. Shipowners themselves admit the unsoundness of many of them. Shippers are advised that, they, in fact, accept the bill of lading under compulsion and despite the many and complicated clauses their rights cannot be taken away, and the responsibility of the carrier for his own negligence cannot be escaped. The old form of bill of lading was after all not such a bad contract as between carrier and shipper. It had the merit of being simple and its clauses were just. The exigencies of modern commerce and the introduction of the steamer into the carrying trade demand possibly something more than was contained in the old form, but certainly not to the extent that many good folks would have one believe. The simpler and fewer the clauses the better it is for all concerned. One clause in a bill of lading that tries to shirk the responsibility of either of the contracting parties weakens the whole document, and in the interest therefore of both carrier and shipper, it is to be hoped the present movement toward framing an equitable document will not be long delayed.—*Maritime Register.*

Subscribe for the MARINE RECORD.

DULL TIMES.

Editor of the Marine Record.

In view of the many expressions of dull times that one hears along the docks and in shipping circles generally, a reminder of the same kind of complaints which prevailed a half century ago, would not be amiss. Considering the prices of commodities freights are nominally fair. But let us go back, if you please, and take a view of times in the long past. In 1810 there were but ten vessels on Lake Erie, whereas in 1831 no less than 100 were afloat on that lake, and the shipping which entered Buffalo aggregated 75,000 tons. The prices during that period ruled as follows: Lumber ranged from \$12 to \$15 per thousand feet, according to quality; shingles, per M from \$1.75 to 2.25; flour, superfine, from \$5 to \$5.25 per barrel; fine, \$4.50; cord wood, \$1.50 per cord; wheat, \$1 per bushel, and whisky 29c and 31c per gallon. These prices rated the same in 1830-32. During the latter year business became somewhat panicky, in consequence of the first appearance of cholera in this country, which first broke out at Quebec in the month of June, and soon thereafter spread throughout the whole lake region, sweeping thousands from the face of the earth. There were seven steamers plying between Buffalo and Detroit in 1832, the Niagara, Captain Blake; William Penn, Captain Wight; Ohio, Captain Cahoon; Enterprise, Captain Miles; Henry Clay, Captain Norton; Superior, Captain Pease, and the Sheldon Thompson, Captain Walker, since which time, it is needless to add, the change has been wonderful, both as regards size and number. Goods shipped from New York for St. Louis were twenty-five days making the passage, first by canal to Buffalo, thence by schooner to Chicago, thence in wagons to the rapids of the Illinois river, whence they were again shipped on board a steamer to St. Louis.

DURING the month of June the public debt decreased \$9,217,256.

CUYAHOGA WORKS,

Established in 1834.
MANUFACTURERS OF ALL KINDS OF
MARINE ENGINES
AND
HEAVY MACHINERY.

Cor. Detroit & Center-Sts, CLEVELAND, O.

Geo. B. Carpenter & Co.,
Ship Chandlers and Sail Makers.

Ship Chandlery Goods of all
Descriptions.

MANILA ROPE OF THE VERY BEST MAKE
Steel and Iron Wire Rope and all its Fittings.

202 to 208 South Water-st.,
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WM. HINGSTON & SON,
Boat Builders,

Steam and Sail Yachts, Hunting, Fishing and
Pleasure Boats, Shell Boats, Spoon Oars.
Foot of Porter Av., Buffalo, N. Y.

W. W. LOOMIS,
Erie, Pa.,
SHIP AND BOAT BUILDING,
Fishing Tugs, Wrecking, Repairing and Pier
Building with Most Improved Facilities.
All Work Guaranteed. Correspondence Solicited.

N. C. PETERSON
Boat Builders,
PLEASURE BOATS AND SAILING AND STEAM YACHTS,
YAWL BOATS, SPOON OARS, STEERING WHEELS, ETC.
385 Atwater st., Near Riopelle,
DETROIT, MICH.

C. E. BENHAM,
317 Detroit Street,
KEEPS IN STOCK
A Full Line of Vessel Supplies,
Lubricating and Lamp Oils of
the Best Quality,
AND A GENERAL LINE OF LAMPS, CROCK-
ERY AND TABLE CUTLERY.

OPEN DAY AND NIGHT.
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ONE PRICE BOOT AND SHOE STORE
And Examine a Fine Line of Spring Goods at
Very Low Prices.

321 Pearl-st., Cleveland, O.

GRUMMOND'S
Mackinac Line,

For Mackinac, St. Ignace, Cheboygan, Alpena, Oscoda,
Port Huron, Detroit and intermediate lake and river
ports.

Steamer ATLANTIC, Capt. D. Nicholson,
Leaves Cleveland every Friday evening at 8 o'clock.
During the warm weather and pleasure season the

Steamer Atlantic
Will extend the regular trip on to Petoskey, Harbor
prings and Charlevoix.

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and dealers in Gas Coals, Nut Coals, and Steam Coal
for Tugs, Barges, etc.

CLARK I. BUTTS,
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DAVID BARNHISEL, Agent.
DOMESTIC & STEAM COAL

Cleveland, Ohio

TRAVELERS' REGISTER.

LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, May 11, 1884, at 12 o'clock noon
the time given in the figures below is the new standard
(Ninetieth meridian) time, which is thirty-three minutes
slower than Cleveland time proper:

Eastward.	Arrive	Depart.
No. 4, Fast Limited Express.....	11 10 A M	12 05 A M
No. 8, N. Y. B. & A. Express.....	10 35 A M	11 00 A M
No. 26, Elyria Accommodation.....	10 05 A M	10 50 A M
No. 35, Buffalo Ac'om via Sandusky	10 35 A M	11 50 A M
No. 35, Toledo Accom via Norwalk	10 35 A M	11 50 A M
No. 12, N. Y. & B. Fast Express.....	11 55 P M	12 25 P M
No. 14, Special N. Y. & Bos. Express	9 40 P M	10 00 P M
No. 22, Night Ex. via Norwalk.....	9 42 P M	10 00 P M
No. 22, Night Ex. via Sandusky.....	9 42 P M	10 00 P M
No. 26, Conneaut Accommodation	11 25 P M	12 00 P M

Westward.	Arrive	Depart.
No. 1, Fast Limited Express.....	11 55 A M	12 05 A M
No. 23, Mich. Express via Sandusky	12 15 A M	12 35 A M
No. 3, Chicago Express via	10 05 A M	10 30 A M
No. 25, Mich. Accom Norwalk.....	10 35 A M	11 50 A M
No. 21, Toledo Ex. via Norwalk.....	11 55 P M	12 20 P M
No. 5, St. Louis Ex. via Sandusky.....	12 15 P M	12 40 P M
No. 9, Chi. Pac. Ex. via Norwalk.....	10 05 P M	10 30 P M
No. 31, Elyria ac to Elyria only.....	11 40 P M	12 00 P M
No. 27, Conneaut Accommodation	11 10 A M	11 40 A M

Sunday train for Nottingham—Depart 8:30 a. m.,
and 1:45 p. m.; returning, leave Nottingham at 9:05 a.
m. and 3:45 p. m.

Reference made to daily, except Sunday,
daily, except Monday.

For full information as to trains and connections ap-
ply at the new city ticket office, corner Seneca and St.
Clair streets, Lake Shore block.

BEE LINE

CLEVELAND, COLUMBUS, CINCINNATI & INDI-
ANAPOLIS.

Commencing Sunday, June 8, 1884, trains of the
Bee Line—Cleveland, Columbus, Cincinnati & Indian-
apolis Railway—will leave and arrive at Cleveland as
follows, CENTRAL STANDARD TIME, 33 minutes slower
than Cleveland time:

No.	Depart
No. 3, Columbus, Cincinnati & Ind. Ex.	7:00 A M
No. 23, Gallion & Wheeling Express.....	6:40 A M
No. 9, Col. Cin., Ind. & St. Louis Ex.....	6:40 P M
No. 5, Col. Cin., Ind. & St. Louis Express.....	12:35 P M
No. 27, Gallion & C. L. & W. Acc.....	4:00 P M
No. 29, Massillon & Ulrichsville Ex.....	5:00 P M

No.	Arrive
No. 8, Col. Cin., Ind. & St. Louis Exp.....	6:40 A M
No. 20, Ulrichsville & Massillon Ex.....	9:00 A M
No. 2, Col. Cin. & Indianapolis Express.....	9:50 P M
No. 14, St. Louis, Ind., Cin. & Col. Ex.....	4:45 P M
No. 22, Gallion Accom.....	10:00 A M
No. 26, Wheeling Accom.....	4:30 P M
No. 4, Col. Cin. & N. Y. Express.....	1:15 A M

Trains marked * daily, all other trains daily except
Sunday.

E. B. THOMAS, General Manager.
O. B. SKINNER, Traffic Manager.

A. J. SMITH, General Passenger Agent.
CLEVELAND, OHIO.

New York, Pennsylvania & Ohio R. R.

NEW YORK, BOSTON AND THE EAST.

The Shortest and Quickest Route to Pitts-
burg, Washington and Baltimore
and the Southeast.

Central or Ninetieth Meridian time, 33 minutes slow
er than Cleveland city time.

Until further notice trains will leave from the new
Central Depot, South Water street and Viaduct as fol-
lows:

6:50 a. m. ATLANTIC EXPRESS—(Daily) Pull-
man sleeping and hotel coaches from
Leavittsburg 8:35 a. m. to New York, Albany and
Boston without change. Arrive at Meadville at 10:40 a.
m. (dinner) Franklin at 12:08 p. m., Oll City 12:30 p. m.,
Corry 12:35 p. m., Jamestown (Lake Chautauque) 1:35 p.
m., Buffalo 5:50 p. m., Rochester 8:20 p. m.; Hornells-
ville 6:00 p. m. (supper); Corning 7:25 p. m.; Elmira 8:05
p. m.; Binghamton 10:05 p. m.; Albany 5:00 a. m. Boston
1:45 p. m.; arriving at New York 6:15 a. m.

2:20 p. m. LIMITED EXPRESS—Through Pull-
man sleeping coach from Cleveland to
New York. Arrives at Meadville at 6:30 p. m., James-
town 8:47 p. m., Salamanca 9:45 p. m., New York
10:10 a. m.

11:00 p. m. NIGHT EXPRESS—(Daily except
Sundays) Sleeping coach from Cleveland
Hornellsville. Arrive at Youngstown at 1:50 a. m.,
Meadville 3:25 a. m., Corry 4:50 a. m., Jamestown 5:57 a.
m., Buffalo 9:20 a. m., Rochester 12:58 p. m., Hornells-
ville 11:00 a. m., Corning 12:07 p. m., Elmira 12:40 p. m.,
Binghamton 2:19 p. m., New York 9:10 p. m. Arrive
at Pittsburgh 5:50 a. m., without change.

2:20 p. m. PITTSBURGH EXPRESS—Daily —
Through without change, Parlor car at-
tached. Arrives at Youngstown 5:00 p. m., Pittsburg
8:02 p. m., Washington 7:09 a. m., Baltimore 8:19 a. m.

4:11 p. m. MAHONING ACCOMMODATION —
Stopping at all way stations, arriving at
Youngstown 6:55 p. m., Sharon 8:01 p. m., Sharpsville
8:10 p. m.

6:50 a. m. PITTSBURGH EXPRESS—Daily —
Through without change. Arrives at
Youngstown 9:30 a. m., Sharon 10:30 a. m., Sharps-
ville 10:40 a. m., Pittsburg 12:45 p. m., Returning,
leaves Pittsburg at 4:15 a. m., 7:45 a. m., 12:55 p. m.,
and 3:45 p. m.

10:35 a. m. YOUNGSTOWN AND PITTSBURGH
ACCOMMODATION—Stopping at all
Way stations, arriving at Youngstown 1:40 p. m., Pitts-
burgh, 5:45 p. m.

Trains arrive at Cleveland, 6:15 a. m., 6:30 p. m.,
10:20 a. m., 1:05 p. m., and 9:45 p. m.

This is the only route by which passengers can
reach Corry, Elmira, Binghamton, New York City
and intermediate points without change. No change
to Boston and New England Cities.

Baggage checked through to all points East

Through tickets and information regarding the
route can be obtained at the office 131 Bank street, and
at new Depot of N. Y., P. & O. R. R., South Water street
and Viaduct, Cleveland, O.

A. E. CLARK, Gen'l Pass'r Ag't Cleveland, O.

J. M. FERRIS, Gen'l Man'gr, Cleveland, O.

M. L. FOUTS, Passenger Ag't, 131 Bank St. Cleveland.

The Nickel Plate!
NEW YORK, CHICAGO & ST. LOUIS
RAILWAY.

The passenger equipment of this New Trunk Line
is all new and is supplied with the latest appliances
necessary to safe speedy and comfortable travel.

At Chicago, passenger trains arrive at and leave
from the Union Depot, Van Buren street.

Following is the time in effect June 1, 1884, and un-
til further notice:

GOING EAST.	
Lv. Chicago.....	7:50 a. m.
Arr. Valparaiso.....	9:45 "
" Fort Wayne.....	1:30 p. m.
" New Haven.....	2:05 "
" West Leipsic.....	3:56 "
" Arcadia.....	4:49 "
" Fostoria.....	5:00 "
" Green Springs.....	5:45 "
" Bellevue.....	6:10 "
Lv. Bellevue.....	6:20 "
Ar. Lorain.....	7:50 "
Ar. Cleveland.....	9:02 "
Lv. Cleveland.....	10:27 "
Ar. Painesville.....	11:38 "
Ar. Ashtabula.....	12:25 p. m.
" Conneaut.....	12:50 "
" Erie.....	2:09 "
" Dunkirk.....	3:47 "
" Buffalo.....	5:20 "

GOING WEST.	
Lv. Buffalo.....	9:50 a. m.
Ar. Dunkirk.....	11:24 "
" Erie.....	1:23 p. m.
" Conneaut.....	2:20 "
" Ashtabula.....	2:51 "
" Painesville.....	3:44 "
" Cleveland.....	4:52 "
Lv. Cleveland.....	4:57 "
Ar. Lorain.....	6:12 "
Ar. Bellevue.....	7:35 "
Lv. Bellevue.....	9:20 "
" Green Springs.....	9:44 "
" Fostoria.....	10:22 "
" Arcadia.....	10:34 "
" West Leipsic.....	11:30 "
" New Haven.....	1:35 p. m.
" Fort Wayne.....	1:50 "
" Valparaiso.....	5:42 "
" Chicago.....	7:50 "

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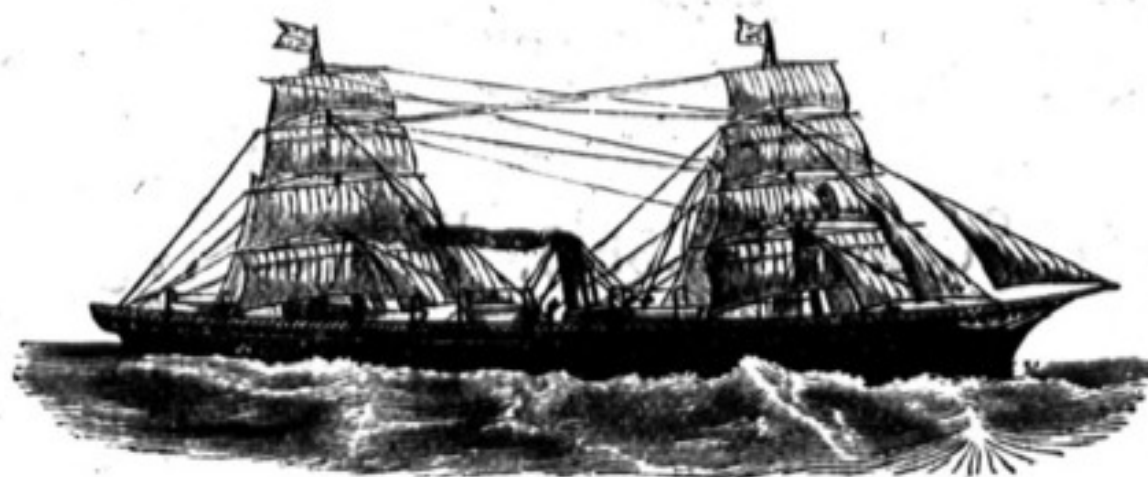
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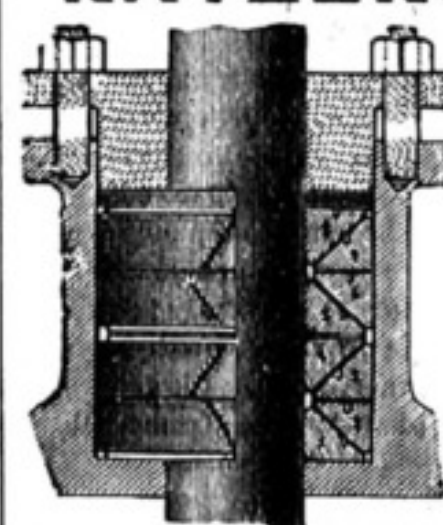
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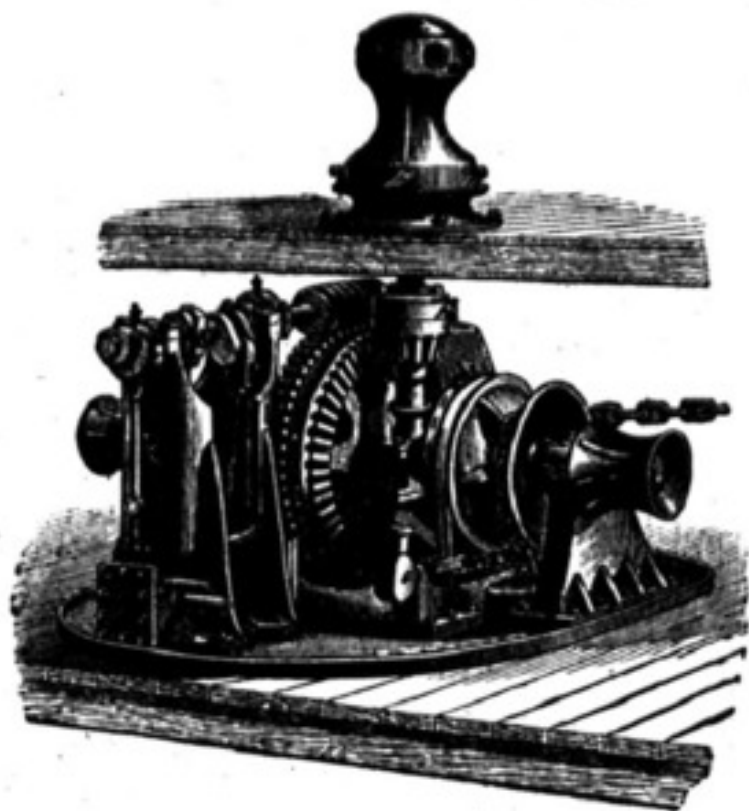
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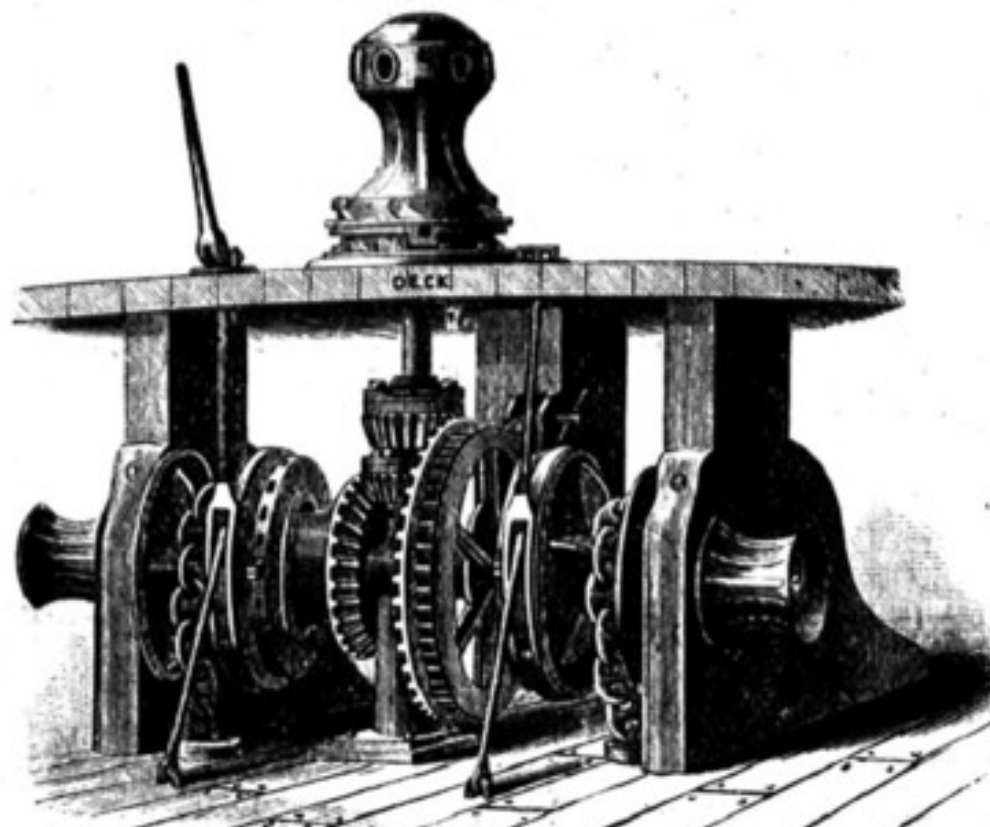
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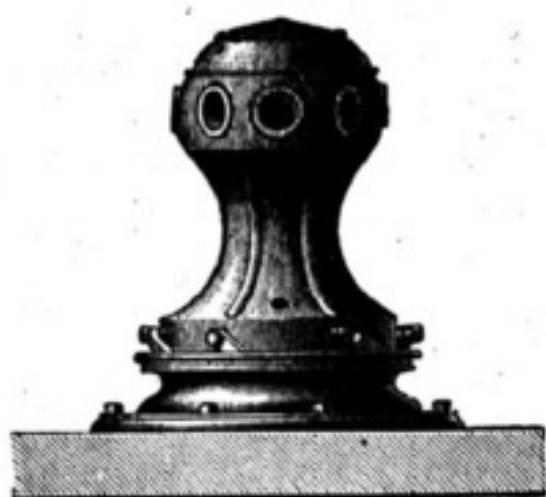
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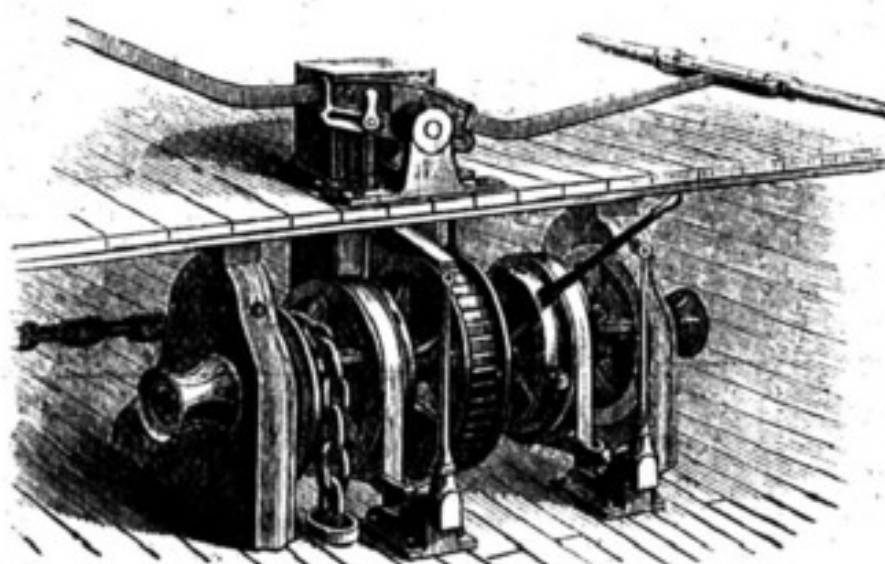
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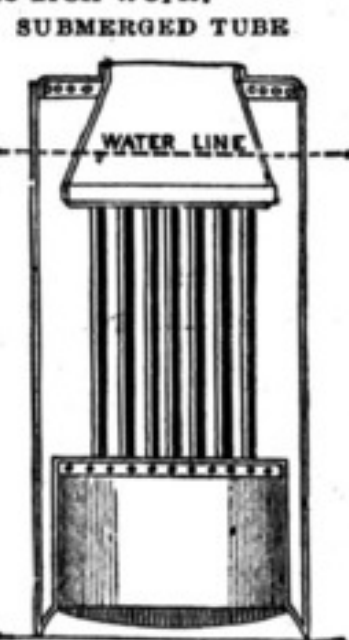
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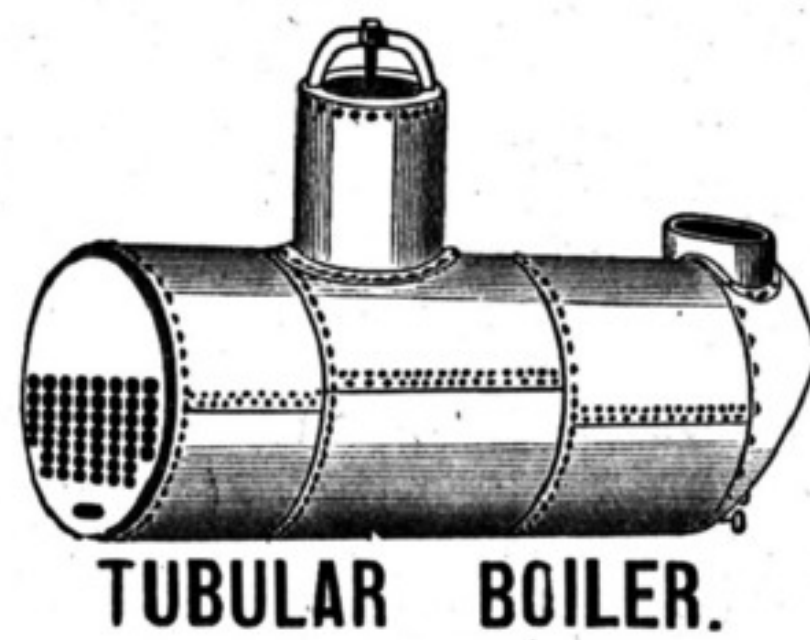
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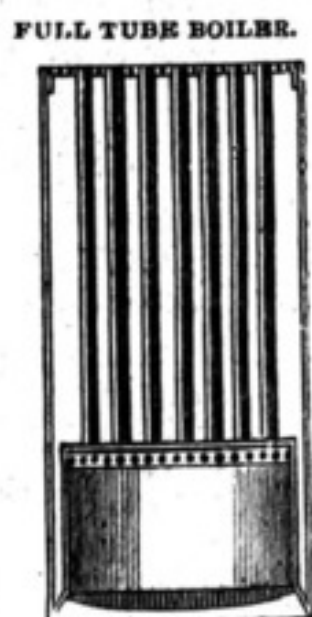
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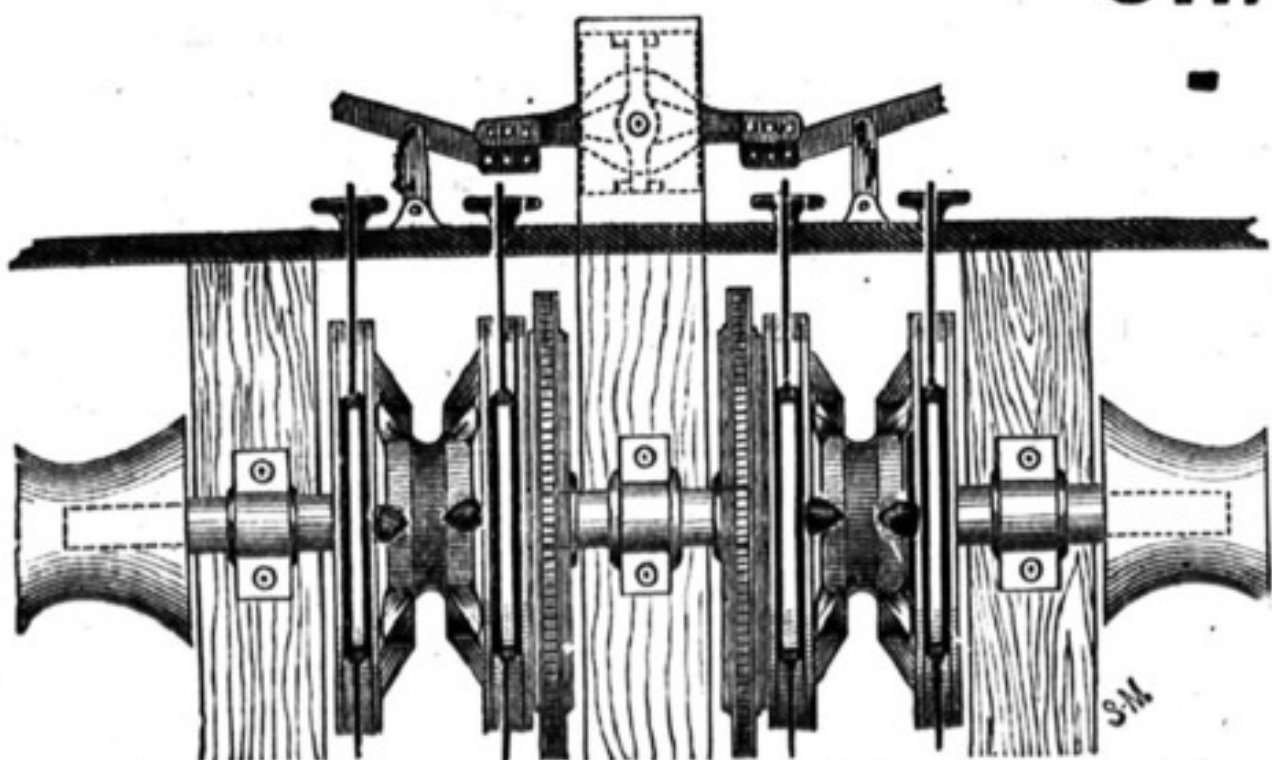


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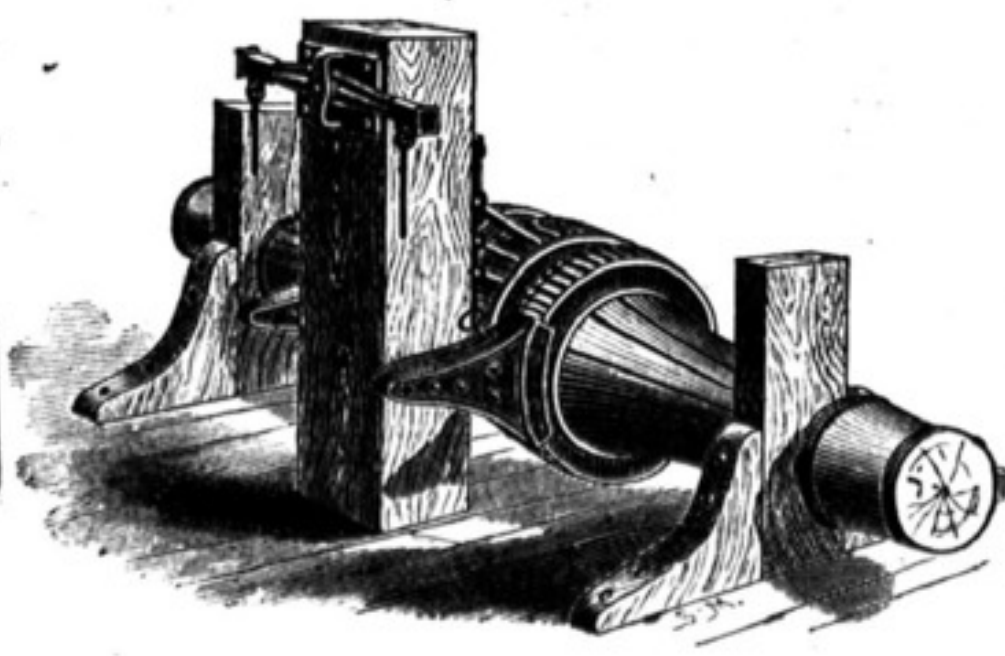


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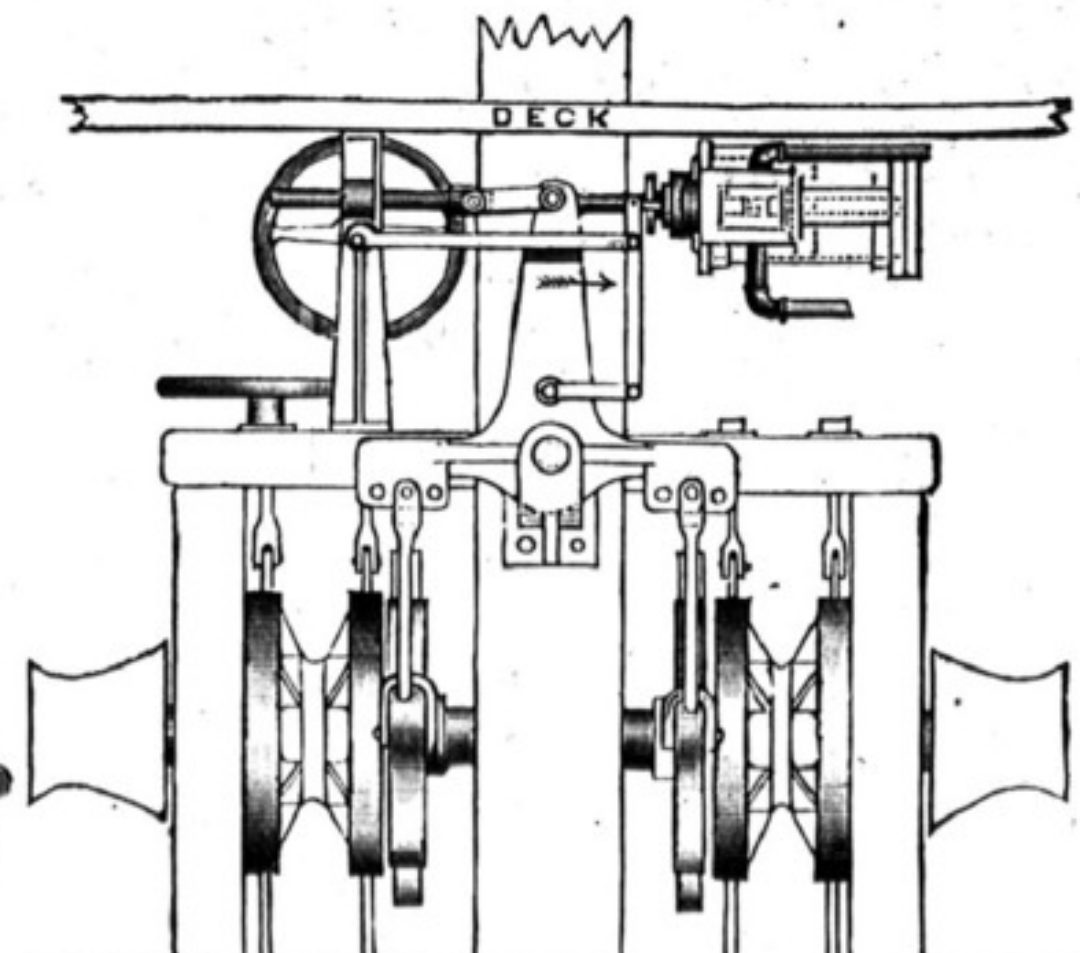
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